Summary of Comments
on Public Review Draft of Riverside County WQMP

	Section of WQMP	Comment	Made By	How Addressed
1	Section 1.0, Introduction, Page 1, 1st paragraph	Please clarify if the project specific WQMP only applies to new/significant redevelopment categories identified in the Permit. If so, please specify that projects not in those categories shall comply with the Drainage Area Management Plan (DAMP), Supplement A, New Development Guidelines.	SARWQCB	These three comments on different sections of the WQMP concern the same issue—how "other projects" are conditioned or permitted. The WQMP addresses New Development and Significant Redevelopment projects as specified in the Permit. Non-WQMP projects will be addressed by Supplement A (as incorporated into the DAMP). Note that Supplement A provides that "other projects" shall be required, prior to issuance of building permits, to develop plans identifying appropriate BMPs (Routine Structural and Non-Structural – as defined in Supplement A) that will be used on-site to control predictable pollutant runoff.
2	Section 2.1, Overview, Page 3, 1st paragraph	The statement "Other development projects will be required to incorporate site design BMPs and source control BMPs through Co-permittee conditions of approval or permit conditions in accordance with the applicable DAMP" is unclear. Please clarify what are the "other development projects" and what procedures specified in the DAMP are applicable to these projects. Please provide a distinction between projects required to prepare a WQMP (those specified in the Permit) and other projects required to comply with DAMP, Supplement A.	SARWQCB	
3	Section 3.0 Projects requiring a Project-Specific WQMP, Page 5	"In addition, all projects must comply with Section 6, Development Planning, of the DAMP." As with previous comment, please clarify the reference to "all projects". Describe the procedure to be followed for those "other projects".	SARWQCB	
4	Section 1.0, Introduction, Page 1, 1st paragraph	The WQMP should address all phases of new development/significant redevelopment projects; not merely post-construction urban runoff. We recognize that the main objective of the WQMP is to ensure that quality and quantity of urban runoff do not significantly change from pre-construction to post-construction. If appropriate control measures are considered and implemented during planning, construction and post-construction phases of the project, it is easier to achieve this objective.	SARWQCB	No revision made. A project specific WQMP is only one step in the process of planning, permitting, designing, constructing, and ultimately operating/occupying a project. Section 2.1 provides a figure that shows where the project-specific WQMP fits into this process. General Plan, environmental documentation (CEQA), and enforcement during construction and operation/occupancy are addressed in other elements of the compliance program as described in the Drainage Area Management Plan.
5	Section 1.0, Introduction, Page 1, 4th paragraph	Please clarify in this paragraph what maps or permits during the development review and approval process require discretionary approval.	SARWQCB	Examples may include tentative tract maps, parcel maps with land disturbing activity, discretionary grading permits where project is not part of a master plan of development, and conditional use permits.

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
6	Section 2.2, Conditions of Approval, Page 3	2nd bullet – Requires the property owner to record a "Covenant and Agreement" with the County Clerk Recorder. This may or may not be, depending on the type of development, the best method of addressing the issue of long-term implementation of the WQMP. It is unclear how this requirement would work for a subdivision where individual homes would be sold to individual homeowners. For most projects the long-term implementation of the WQMP will only consist of treatment control BMP maintenance. It should be left to the project applicant as to how they meet the long-term funding and maintenance requirement. This is addressed through the WQMP certification and therefore this requirement in the Conditions of Approval should be deleted.	Construction Industry Coalition on Water Quality (CICWQ)	Section 2.2 has been modified to allow consideration of alternative instruments to bind project-specific WQMPs to New Development and Significant Redevelopment projects as specified in the Permit. The discussions of mechanisms to ensure implementation and maintenance of BMPs included in project-specific WQMPs addressed in Sections 4.6 and 6.0 of the WQMP have been revised consistent with the modification in Section 2.2.
7	Section 2.3, Implementation of WQMP Requirements, Page 4	Please indicate that the municipalities, upon approval of the WQMP, will prepare a local implementation procedure that describes the responsibilities of each title/position within each department in the WQMP review and approval process. Training and education for staff that will be implementing this requirement should be described in this procedure.	SARWQCB	WQMP revised to state that, prior to January 1, 2005 each Co-Permittee will document their procedures for implementation of the WQMP, including a description of departmental responsibilities. The Co-Permittees' documented procedures will be included in their 2004/2005 Annual Report.
8	Section 2.3, Implementation of WQMP Requirements, Page 4, Table 1	This table is incomplete.	SARWQCB	Information completed by Co-Permittees
9	Section 3.1, Significant Redevelopment, Page 5	Please note that if the redevelopment results in an increase of more than fifty percent of the impervious surface, then a WQMP is required for the entire development.	SARWQCB	Revision has been included.
10	Section 4.1 Project Description, Page 8, 4th bullet	Please consider the following modification: "The watershed in which the project is located (Santa Ana or Santa Margarita), sub-watershed (Salt Creek, San Jacinto, Warm Springs, Temescal, etc.), and Reach (found in Table 3-1 of the Water Quality Control Plan for the Santa Ana River Basin - Basin Plan)".	SARWQCB	Revision has been included. A link to the Santa Ana Region Basin Plan on the Regional Board web site has been provided to preparers of project-specific WQMPs on District web site.

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
11	Section 4.2, Site Characterization, Pages 8 and 9	Add a bullet to require a summary of a Phase 1 site assessment to identify potential hazardous substances release at the site if one is prepared or required for that site. Include a summary of any remediation conducted and site use restrictions if any.	SARWQCB	The following bullet item has been added: "If a Phase 1 environmental site assessment has been prepared for the project site, a summary of the site remediation conducted (or to be conducted) and any site use restrictions."
12	Section 4.3 Identify Pollutants of Concern, Page 9	Please add that site-specific conditions must also be considered as potential pollutant sources, such as legacy pesticides or nutrients in site soils as a result of past agricultural practices or hazardous substances in site soils from industrial uses. Sites that have been properly remediated may not pose a current threat or a future threat to storm water quality.	SARWQCB	The following sentence has been added after the second sentence: "Additionally, in identifying pollutants of concern, the presence of legacy pesticides, nutrients, or hazardous substances as a result of past land uses and their potential for exposure to stormwater must be addressed in project-specific WQMPs."

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
13	Section 4.3, Identify Pollutants of Concern, Page 9	There are a number of 303(d) listed water bodies within the permitted area. Please add the following language (excerpted from SB and OC WQMPs). "To identify pollutants of concern in receiving waters, each project proponent preparing a project-specific WQMP shall, at a minimum, do the following: a. For each of the proposed project discharge points, identify the proximate receiving water for each point of discharge and all downstream receiving waters, using hydrologic unit basin numbers as identified in the most recent version of the Water Quality Control Plan for the Santa Ana River Basin. b. Identify each proximate and downstream receiving water identified above that is listed on the most recent list of Clean Water Act Section 303(d) (CWA 303(d) list, Exhibit ___, Table___) impaired water bodies. List all pollutants for which the receiving waters are impaired. c. Compare the list of pollutants for which the receiving waters are impaired with the pollutants expected to be generated by the project (as discussed in Part 1, above). Potential pollutants identified in Table __ require an offset if the potential pollutant is also identified as a pollutant causing or contributing to an impairment of water quality standards. Pollutants requiring an offset are those on the State's most recently approved CWA 303(d) list. The discharge of any listed pollutant to an impaired water body on the CWA 303(d) list shall require an offset (e.g., no net loading) for any additional loading from the proposed project to ensure no further degradation of the impaired water body. Exhibit __, Table __ contains a list of CWA 303(d) list impaired water bodies and the pollutants attributed to these impairments."	SARWQCB	Included this text, with appropriate modifications for consistency, through bullet item c. A link to the 303(d) list on the Regional Board website has also been added to the WQMP. The last paragraph has not been included based on the following considerations: • The MS4 Permit does not require offsets. • The intent of the last paragraph, which introduces the concept of "offsets," is unclear. • Note that the proposed paragraph addresses 303(d) listed waters, not those with an established TMDL. Identification of regulatory authorization for pollutant trading for NPDES permit compliance prior to establishment of a TMDL is needed.

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
14	Section 4.4 Identify Hydrologic Conditions of Concern, Pages 9 and 10	Please explain and demonstrate how Condition A, B, or C does not present hydrologic conditions of concern.	SARWQCB	The Center for Watershed Protection noted in their Channel Protection Article, published in the November 2001 edition of "Watershed Impact," that there are practical limitations on how broadly channel protection criteria can be applied. Specifically, there is a minimum site size at which the required orifices and/or weir sizes become too small to effectively operate and maintain. The article also notes that channel protection is generally not needed where sites discharge directly to a fourth order or greater stream (river), lake, reservoir or estuary. These concepts are also supported in CASQA's New Development/Re-Development BMP Handbook (CASQA Handbook). Condition A does not present a hydrologic condition of concern because the discharges are into maintained (and improved) flood control infrastructure. Once discharges enter maintained flood control facilities, the flow tends to normalize (reach a normal depth, and velocity) dictated by the characteristics of the maintained facility. These facilities are designed to prevent channel erosion, either through armoring (concrete, riprap) or by section design (for earthen facilities). Vegetation within these facilities is either prohibited or regularly maintained to ensure flood control capacity. Conditions B and C are reflective of the limits of current BMP technologies to address. Condition B reflects a flow rate below which required orifices become too small to effectively operate. Condition C reflects a site size that, in standard practice is considered too small to generate flow rates sufficient to require treatment. It should be noted that this is more restrictive than the CASQA Handbook guideline for minimum site size for extended detention basins (5 acres). The Permittees have opted for a smaller site size because a 2-year design rainfall depth for a hydrologic condition of concern event generates higher flow rates than the 85% runoff event used for design of extended detention basins.

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
15	Section 4.4 Identify Hydrologic Conditions of Concern, Page 10, 1st paragraph after Condition C	This paragraph does not mirror those parameters under Methodology A and does not provide sufficient guidance to assess hydrologic impacts required under Methodology B.	SARWQCB	The Permittees have modified Methodology A to mirror the parameters described in this paragraph. Methodology B is generic and provides for innovative solutions. The paragraph provides a general description of the requirements and seems to be in the same context of innovative solutions. The 2nd paragraph under Condition C provided the guidance to assess hydrologic impacts. Additional text has been added to clarify the guidance.

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
16	Section 4.4 Identify Hydrologic Conditions of Concern, Page 10, Methodology A	a. It is not clear if items 1-5 all must apply or any one may apply. b. This method only attempts to mitigate the peak flow rate increase with development. Please explain how this will address changes in other flow characteristics such as flow velocity, runoff volume, time of concentration, and flow duration.	SARWQCB	a. The introductory paragraph has been modified to clarify that all provisions apply. b. Text has been revised to emphasize that Site Design BMP concepts are the first measures implemented to address hydrologic conditions of concern. If Site Design BMP concepts are not sufficient to address the hydrologic conditions of concern, then Methodology A (or B) is to be implemented. Methodology A is consistent with over-mitigation techniques preferred for natural channel erosion protection specified in the article on channel protection published by the Center for Watershed Protection in the November 2001 edition of "Watershed Impact." The article notes that 24-hour extended detention, or slowly releasing the entire volume of storm over a 24-hour period helps ensure that runoff is released so gradually that critical erosive velocities will seldom be exceeded in downstream channels. It also notes that extensive modeling in Maryland demonstrated that 24-hour extended detention works well through a 2" rainfall event (or approximately 1-year event in Maryland). Since rainfall depths are significantly less in the arid west (compared to Maryland), the Permittees opted to use a 2-year event for the Permit Area. The 2-year event produces nearly equivalent rainfall depths to a 1-year event in Maryland. This also keeps the methodology somewhat consistent with the District's existing increased runoff criteria. It is our understanding that this method has been adopted as the basis for channel protection in Maryland, and is also being considered in New York, Vermont and Georgia. Methodology B, keeps the same standard of performance, but allows the Permittees and developers to contemplate other, and potentially more effective, site-specific solutions for hydrologic conditions of concern. It is the District's intention to review Methodologies A and B upon the release of recommendations from either Ventura County or the SMC's studies related to hydrologic conditions of concern. If the District is satisfied that criteria more representative of arid watersheds in Riverside County is proposed by those studies, we will recommend revision of the WQMP to incorporate it.

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
		c. It should be made clear that this control measure is in addition to site design, source control, and/or other treatment control BMPs.		c. It is possible that Site, Source or Treatment Control BMPs, such as an extended detention basin designed to meet the criteria of this section, could address the Hydrologic Conditions of Concern requirements. No revisions made.
17	Section 4.4 Identify Hydrologic Conditions of Concern, Page 10, Methodology B	This methodology does not provide sufficient guidance on how project proponents may conduct a hydrologic impact assessment.	SARWQCB	Methodology B has been revised to remove the reference to assessment. Assessment of hydrologic conditions of concern is now discussed in the paragraphs preceding the two methodologies.
18	Section 4.5, BMP Selection Section 7, Waiver of Treatment Control BMP Requirements	The WQMP should require the implementation of BMPs sufficient to address the project's pollutants of concern and hydrologic conditions of concern, however the draft WQMP potentially mandates specific BMPs whether or not they are needed to address the projects conditions of concern. The WQMP should leave it to the project applicant to select the best combination of site design, source control, treatment control and/or regional watershed BMPs necessary to address the projects pollutants of concern and hydrologic conditions of concern.	CICWQ	Clarification added that where the project proponent believes that design criteria adequately addresses pollutants of concern and Treatment Controls are not needed, a request for a waiver must be submitted and approved by the Permittee and the RWQCB. Section 7, paragraph 1 of WQMP allows for waivers where pollutants not exposed to stormwater during Flow Based Design or Volume Based Design events. Situations where this may be applicable are where site design and source control BMPs adequately contain pollutants and prevent exposure during the aforementioned design events.
19	Section 4.5, BMP Selection, Page 12, Table 2	Site Design BMPs a. Provide a reference section where site design BMPs may be found in the WQMP, i.e., (see Section 4.5.1). b. This table states that site design BMPs are to be implemented to the extent practicable. Other than those noted in the footnotes, please determine if any of these site design principles contradict existing ordinances and identify if there are institutional impediments that discourage plan reviewers from approving reduction in connectedness, narrowing of streets, narrowing of sidewalks, elimination of curbs, etc.	SARWQCB	a. Reference has been provided. b. These are questions/issues that will be addressed by the Co-Permittees in implementing the new WQMP process. These questions/issues do not need to be addressed in the WQMP for purposes of review and approval by the SARWQCB.

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
20	Section 4.5, BMP Selection, Page 12, Table 2	Some of the BMPs listed in Supplement A are not shown on Table 2. Please add or explain why they should be dropped. a. Non-structural BMPs – Spill contingency plan. b. Structural BMPs – Inlet trash racks.	SARWQCB	a. Other agencies and regulations address the need for "formal" spill plans and emergency response where needed and impose appropriate conditions on projects. This measure was not included to avoid duplicating requirements. b. Inlet trash racks are typically used for large diameter regional or sub-regional conveyances. The purpose for inlet trash racks is to prevent flooding potentially caused by large debris lodging within a conveyance. Other BMPs are more appropriate for water quality purposes.
21	Section 4.5, BMP Selection, Page 12, Table 2	Source Control BMPs – Typing error "Common Area Litter Control" is repeated.	SARWQCB	Typographical error corrected.
22	Section 4.5, BMP Selection, Page 12, Table 2	Treatment Control BMPs – Provide a reference to the section where treatment control BMPs and waiver provisions are found in the WQMP.	SARWQCB	Reference provided.
23	Section 4.5.1, Site Design BMPs, Page 13	Please add the following paragraph at the end of the last bullet: "These same practices, because they reduce the volume and usually the rate of runoff, also have the benefit of reducing the amount of storm water that must be treated before being discharged or to be treated in regional facilities. These design principles offer an innovative approach to urban storm water management by uniformly or strategically integrating storm water controls throughout the urban landscape. Resources for applying these principles include Start at the Source (Bay Area Storm water Management Agencies Association, 1999), and Low Impact Development Design Strategies, An Integrated Design Approach (Prince George's County, Maryland; Department of Environmental Resources, 1999)."	SARWQCB	Additional text included. In addition, links to the web sites for the referenced materials has been added.

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
24	Section 4.5.1, Site Design BMPs, Page 13	a. Site Design Concept 1, 1st Bullet, Maximize the Permeable Area – Please add the following paragraph: "Runoff from developed areas may be reduced by using alternative materials or surfaces with a lower Coefficient of Runoff, or "C Factor". The C factor is a representation of the ability of a surface to produce runoff. Surfaces that provide higher runoff volumes are represented by higher C factors. By incorporating more pervious, lower C factor surfaces into a development, lower volumes of runoff will be produced. Lower volumes and rates of runoff translate directly to lowering treatment requirements. b. Site Design Concept 1, 4th bullet – It states that landscaped buffer can be incorporated between sidewalk and street. It is not clear if the vegetated buffer is to filter the runoff from the house onto the street or runoff from the street. To treat street runoff, which is the recommended way, that area should be at the same level as the street or lower. This concept is discussed in site design concept 2. The two concepts should be more clearly differentiated.	SARWQCB	a. Additional text included recognizing limitations where soils are not sufficiently pervious or where infiltration should be avoided (i.e., hillside applications). b. Typographical error. The statement "Incorporate landscaped buffer areas between sidewalks and streets" was intended to be a separate bullet item. This has been corrected.

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
25	Section 4.5.2.1, Non-Structural Source Control BMPs, Pages 15 and 16	a. Education/Training for Property Owners, 2nd paragraph, last sentence – Missing preposition "… at the time of occupancy." Also, this paragraph refers to a resources list of educational materials. Unless this list of educational materials varies for each permittee, the current list should be included as an attachment to this guidance, preferably grouped into appropriate categories, such as residential, retail commercial, vehicle-related commercial, industrial, etc. b. Education/Training for Property Owners, 3rd paragraph: "For Projects where employees are required to perform activities that may impact the quality of urban runoff, BMP training and education programs must be provided to all new employees at the time of hire and annually thereafter." c. Activity Restrictions, 3rd bullet: "Prohibit vehicle washing, maintenance, or repair on the premises or restrict those activities to designated areas (such as inside garages for repairs and on lawns for washing vehicles)." d. Irrigation System and Landscape Maintenance, 1st sentence – This refers to Co-Permittee's water conservation ordinance. Please state how project proponents may access this information. e. Common Area Litter Control – "…For industrial and commercial Projects (including apartments) and for Projects with HOAs/POAs, the project-specific WQMP must address… or HOAs/POAs for investigation, and identification of the party responsible for litter control."	SARWQCB	a. Typographical error has been corrected. A reference to the District's web site has been added. If such a list is ultimately added, it must be sufficiently general so the materials can change without revising the WQMP. b. This sentence has been revised as follows: "For Projects where people will be employed or contracted to perform activities that may impact Urban Runoff, BMP training and education programs must be provided to all new employees within 6 months of hire date and annually thereafter. c. The 3rd bullet has been revised as follows: "Prohibit vehicle washing, maintenance, or repair on the premises or restrict those activities to designated areas (such as repair within maintenance bays and vehicle washing on properly designed wash racks)." d. A statement has been included noting that most municipal codes can be accessed through the Co-Permittees' websites or hard copy can be obtained through planning/permitting counters. e. Revisions not incorporated. An apartment complex is a multi-family residential project, not an industrial or a commercial project. Industrial or commercial projects would have Property Owners Associations (POAs), not Home Owners Associations (HOAs).

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
26	Section 4.5.2.1, Non-Structural Source Control BMPs, Pages 15 and 16	f. Street Sweeping Private Streets and Parking Lots – "For industrial/commercial Projects and for other Projects with HOAs/POAs, the frequency of sweeping privately owned streets shall be described in the project-specific WQMP. The frequency shall be no less than the frequency of street sweeping by the Co-Permittee on public streets. For Projects with parking lots, the parking lots shall be swept at least ~~annually~~ quarterly, including ~~preferably in late summer or early fall~~ just prior to the start of the rainy season. The project-specific WQMP should identify the anticipated sweeping frequency, source of funding and the party responsible for conducting the periodic sweeping."	SARWQCB	The Permittees have reviewed the available literature on street sweeping including the CASQA Municipal BMP Manual and the CASQA New Development and Redevelopment BMP Manual. The Manuals recommend a frequency of at least once per year, just prior to the rainy season. The WQMP has been modified accordingly. Further, the Santa Ana MS4 Permit Section XI.L requires the Permittees to review the effectiveness of their street sweeping frequencies. Since the WQMP requires private developments to maintain the greater of the street sweeping frequency adopted by the regulating Co-Permittee (per XI.L) or that identified by CASQA BMP Handbook, the text has been revised to make it clear that street sweeping should immediately precede the wet season.
27	Section 4.5.2.2 Structural Source Control BMPs	a. Protection of Slopes and Channels, 2nd bullet on page 18 – The bullet item states that riprap should be used to avoid erosion where outlets of storm drains into channels. Ripraps, if not properly designed, may cause mosquito breeding and riprap may not be the best alternative for multiuse facilities. Please consider describing other viable alternatives such as turf reinforcement mat (TRM) planted with appropriate vegetation. Also, please add the following language at the end of this paragraph: "Other methods of managing flow velocity and volume must be considered. A useful reference for alternative methods is: A Primer on Stream and River Protection for the Regulator and Program Manager," by Ann L. Riley, San Francisco Regional Board. The primer can be accessed on the internet at www.swrcb.ca.gov/rwqcb2/Agenda/04-16-03/Stream%20Protection%20Circular.pdf."	SARWQCB	a. The first sentence in the 8th bullet has been revised as follows: "Install energy dissipaters~~,~~ ~~such as riprap,~~ at the outlets of new storm drains, …" The other suggested text will not be included.

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
28	Section 4.5.2.2 Structural Source Control BMPs, Page 18	b. Protection of Slopes and Channels, 3rd bullet on page 18 – This bullet item describes ways to stabilize a channel under conditions not suitable for grassy lining. The three alternatives described include concrete soil, geo-grid and riprap. The alternatives must be based on a consideration of fluvial geomorphology and bioengineering techniques. c. Please move the paragraph entitled "Provide Community Car Wash Racks" on page 20 to before the paragraph on properly design fueling areas on page 18. Similarly on Table 2, page 12, please make the corresponding move under structural BMPs. This BMP could be easily overlooked in its current position after the commercial/industrial BMPs. d. Properly Design Fueling Areas, item 5 – i. Please revise as follows: The fuel dispensing area must be designed to prohibit spills from draining to the street<u>,</u> ~~or~~ storm drain system<u>, or offsite</u>. Also, please add the following sentence: "Spills must be cleaned up in accordance with a Spill Contingency Plan." ii. Please specify that any trucking facilities should also have the proper grades to avoid fuel spill runoff. Please specify that all drain inlets for unmanned fueling facilities must have fuel/water separators.	SARWQCB	b. No revision made. Permittee engineering staff will make a determination of adequacy of erosion control measures based on currently accepted methodologies. c. This revision has been included. d.i. The first suggested revision has been made. The second suggested revision will not be included, as this is a structural BMP related to engineering design, not operational procedures. d.ii. This revision was not included. Item #4 states that fueling areas shall drain to an appropriate Treatment Control BMP, which could include fuel/water separators.
29	Section 4.5.2.2 Structural Source Control BMPs, Pages 19 and 20	Properly Design Outdoor Material Storage Areas – BMP S8 of Supplement A requires that "For commercial outdoor vehicle and equipment salvage yards, and commercial outdoor recycling, the entire storage area shall drain through water quality inlets." Please add this or explain why this requirement is not applicable.	SARWQCB	A bullet has been added under "Properly Design Outdoor Work Areas or Processing Areas" stating that salvage yards or recycle facilities must direct all runoff to appropriate Treatment Control BMP(s).

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
30	Section 4.5.3, Treatment Control BMPs, Pages 20 and 21	a. Page 20, 2nd paragraph – Add the following as the 1st sentence" "For identified pollutants of concern that are causing impairment in receiving waters, the project WQMP shall incorporate one or more Treatment Control BMPs of medium or high effectiveness in reducing those pollutants." b. We recommend placing the information referenced to be in Exhibit C within this section as well. c. Page 21, last paragraph, Footnote 12, page 13 regarding hillside grading ordinances that limit or restrict infiltration of runoff applies to this paragraph also.	SARWQCB	a. The following language has been added for clarity: "For identified Pollutants of Concern that are causing impairments in Receiving Waters, the Project-Specific WQMP shall incorporate one or more Treatment Control BMPs <u>of at least medium</u> effectiveness in reducing those pollutants." b. The Permittees copied the table in Exhibit C to the WQMP. c. Footnote 12 on page 13 has been repeated for Vegetated Filter Strips and Vegetated Swales.
31	Section 4.5.3, Treatment Control BMPs, Page 21	1st full paragraph – Requires BMP capacity to be functional before any phased work begins. This is inconsistent with the intent of a WQMP. The intent of a WQMP is to address post-construction runoff. Therefore, the WQMP should only require the BMP capacity to be functional <u>before occupancy is granted</u>. The construction requirements from the General Construction Permit and the Municipal Stormwater Permit already address construction-phase pollutants.	CICWQ	The following modified language has been added: "BMP capacity must be functional prior to the issuance of occupancy permits, or certificates of use (or equivalent), if no occupancy permits are issued."

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
32	Section 4.5.3.2, Volume Based Treatment Control BMPs, Page 22	Extended Detention Basin – Please state that the forebay should be concreted and is a critical area for regular maintenance and debris removal. The forebay should drain within two hours so that nuisance flows will be able to dry out from daily irrigation overflows. Alternatively, inlet filters may be useful for pretreatment into an extended detention basin. Although highly permeable soils may cause groundwater pollution, that is not likely if appropriate source controls are implemented and if the groundwater is deep. Thus, highly permeable soil is preferred, up to a limit, so that nuisance flows don't cause puddles. In fact, if the soil is not permeable enough, it may be necessary to install under drains to minimize puddling. Please specify that hydrophytic plants be used in the low areas of the basin as such plants may absorb dissolved pollutants. Please discuss how low flows may be shunted into the pond and allow high flows to bypass the basin to prevent the first flush from being washed out of the basin.	SARWQCB	The Stormwater Quality Best Management Practice Design Handbook contained in Appendix C of the WQMP addresses the referenced issues in detail under the “Extended Detention Basin” section.

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
33	Section 4.5.3.4, Flow-Based Design, Page 25	The CASQA Handbook has flagged use of the rational formula in certain situations as "Caution, High Caution, and Not Recommended". Please identify an alternative calculation method for those situations. Please provide sample calculations.	SARWQCB	The cautions in the CASQA handbook regarding the Rational Formula pertain to overestimation of the flow rate for "undeveloped" conditions when considering large areas or frequent storms using generalized "C" values not accounting for variability in rainfall intensities or other factors. As noted in the CASQA handbook, these C values are generally less accurate for low rainfall intensities. The District's Rational Method uses "C" values based on infiltration rates that consider a number of variables including antecedent moisture condition, cover, rainfall intensity, soil type and land use. Further, the District's "C" values are based on pervious area infiltration rates that compare favorably to rates from ring infiltrometer tests conducted by the Los Angeles Flood Control District. The District's Rational Method provides more accurate estimates of flow. The Rational Method has been the District's standard for calculating flow rates for areas up to 500 acres for many years. This method is simple, practical and best suited for the purpose of calculating water quality flow rates in the Project Area. Further, we believe that the methodology used to develop the "C" values used in the Riverside County BMP manual addresses the issue raised in the CASQA BMP handbook.
34	Section 4.5.3.5, Volume-Based Design, Pages 25 and 26	a. 1st and 2nd bullets – Please define how the tributary area is determined. Please reconcile that with the definition in the ASCE/WEF Manual, which is based on watershed. b. 3rd bullet – This refers to Exhibit Z but should be Exhibit D. Please revise. c. Please provide sample calculations.	SARWQCB	a. Tributary area, drainage area, and watershed area are interchangeable terms. For consistency the WQMP has been revised to consistently use the term "tributary area." Additional guidance is provided in Appendix C. b. Typographical error corrected. c. Sample calculations have been incorporated into the Riverside County Storm Water Quality Best Management Practice Design Handbook.

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
35	Section 4.5.4 Equivalent Treatment Control Alternatives, Page 26	Please add the following items: a. Off-site Treatment Control BMPs shall not cause water quality impairment or increase loading of pollutants of concern or contribute to an exceedance of water quality objectives. b. Off-site Treatment Control BMPs shall not be placed in a natural waterway.	SARWQCB	a. Text added as an additional bullet item. b. Sixth bullet item states, "Off-site BMPs must be implemented prior to proximate Receiving Waters.
36	Section 4.6, Operation and Maintenance, Pages 26 and 27	a. Add a bullet, which states as follows: "Signed statement (with date) accepting responsibility for maintenance, repair, replacement, and inspection of BMPs. O&M agreements must be transferred to future site owners as described in Section 6.2." b. Please include a discussion of various acceptable long-term operation and maintenance mechanisms. Include these options in the WQMP template for the project proponent to choose.	SARWQCB	a. Revision not included. Certification statement for WQMP should be adequate. Transfer of property addressed in Section 6.2. b. Revision not included. This is jurisdiction and site specific with regard to what will be acceptable.
37	Section 4.8 WQMP Certification, Page 28	The certification statement in this section differs from the version in the template. Both versions lack accountability to the city such as the necessary city/county notification in the event of a property (and WQMP responsibility) transfer and lacks a certification under penalty of law clause. Please refer to the SB County WQMP (June 01, 2004) certification language.	SARWQCB	A revised certification has been proposed upon review of the SB County WQMP.

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
38	Section 5.0 Regionally-Based Treatment Control, Page 29	Please add the following text (excerpted from the San Bernardino and OC WQMP): a. One or more Agencies (or, in some cases another agency) has prepared a regional or watershed plan to determine where on-site and/or regional or watershed Treatment Control BMP facilities are appropriate and it has been approved by each Agency intending to utilize the Treatment Control BMP facilities as part of the new development/significant redevelopment program. During the term of the Permit, the Executive Officer, after notice to interested parties, must make a determination that the regional or watershed treatment BMP exceeds the water quality solution provided by the onsite structural BMPs otherwise required by section XII. B. 3 of the Permit and is otherwise consistent with the Permit and the Clean Water Act. The request for determination should be made as early in the design process as possible. b. The BMPs in a regional or watershed program with impaired waterbodies and/or watersheds subject to Total Maximum Daily Loads are to address the applicable implementation requirements of any adopted TMDLs.	SARWQCB	a. It should be noted that Section VIII.B.6.d of the Santa Ana MS4 Permit states: "The Principal Permittee and the Co-Permittees, individually or jointly, as appropriate, may develop and implement regional or sub-regional watershed management BMPs that address Urban Runoff from New Development and Significant Redevelopment." Although the Permittees were required to prepare an assessment of their MS4's to evaluate opportunities to configure/reconfigure channel segments to function as pollution control devices and to optimize beneficial uses (Section XI.E) this study does not require the approval of the Executive Officer, nor do the provisions of Section VIII.B require the approval of individual regional or sub-regional BMPs by the Executive Officer. For this reason, the referenced language is not appropriate to this WQMP and has not been included. b. Parallel text has been included in the WQMP: "The ability of the regionally-based BMP to address Total Maximum Daily Load (TMDL) requirements for any adopted TMDLs. If a regionally-based BMP does not address TMDL requirements, additional on-site BMPs may be required."

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
39	Section 5.0 Regionally-Based Treatment Control, Page 29	It may be possible that a regionally-based treatment control BMP will address all pollutants of concern and hydrologic conditions of concern for a particular project. It should be left to the operating entity of the regional BMP to determine which on-site BMPs, if any, are needed for the regional BMP to function properly and address the pollutants of concern and hydrologic conditions of concern for the receiving water(s).	CICWQ	Text revised to address the comment as noted below: A regionally-based Treatment Control BMP may address all pollutants of concern and hydrologic conditions of concern associated with Urban Runoff from a project. The operating entity of an existing regionally-based Treatment Control BMP shall be able to provide project proponents with information describing the tributary area the BMP was designed to service and the pollutants of concern and/or hydrologic conditions of concern (POC/HCOC) addressed by the BMP (including any Total Maximum Daily Load requirements). The project proponent is responsible for determining the POC/HCOC associated with the project, comparing those with the POC/HCOCs addressed by the regionally-based Treatment Control BMP, and determining what additional on-site Site, Source and Treatment Control BMPs are required.
40	Section 6.2, Changes in Site Ownership, Page 30	There should be a mechanism to ensure continuity, via a binding agreement, for operations and maintenance of control measures, access to facilities and for funding. Please refer to the template in San Bernardino County's WQMP, Attachment A-2.	SARWQCB	This comment is addressed in Section 4.6 (5th bullet) of the WQMP. Text modified to further clarify intent.
41	Section 7.0 Waiver of Treatment Control BMP Requirements, Page 30	Please consider moving the last two sentences in the 2nd paragraph ("Co-Permittees shall notify the Executive Officer of the Regional Water Quality Control Board by Certified Mail (with Return Receipt) within thirty (30) calendar days after issuing a waiver. The notification shall include a copy of the waiver documentation and a copy of the Project's WQMP.") as a separate paragraph at the end of the section.	SARWQCB	Revision has been made.
42	Exhibit A, Project-Specific WQMP, Section V.1 Site Design BMPs, Page 6	Please provide some design guidelines as subcategories in Table 1, to facilitate incorporation of these site design BMPs. We suggest the format presented in the San Bernardino WQMP template, Attachment A, pages A-10 to A-14	SARWQCB	Table 1 in Exhibit A is equivalent to the San Bernardino WQMP template. However, minor revisions to the table were made to better relate to Section 4.5.1 of the WQMP.

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
43	Exhibit A, Project-Specific WQMP, Section II, Site Characterization, Page 3	This section states that if an infiltration BMP is utilized, then a soils report must be included. This report should identify the soil type(s), infiltration capacity of the soils at the final grade bottom of the infiltration BMP and any available information pertaining to the depth to groundwater beneath the site. These conditions should be included with the 6th bullet item in Section 4.2.	SARWQCB	The 6th bullet item in Section 4.2 of the WQMP has been modified to read, "If infiltration BMPs are proposed, a soils report should be included as an appendix identifying the soil type(s), ~~and~~ infiltration capacity of the soils, and depth to groundwater."
44	Exhibit A, Project-Specific WQMP, Section V.3, Treatment Control BMPs, Page 8	Table 3 has a limited number of treatment control BMPs. We are concerned that only having a limited number of BMPs in the table might discourage the use of other BMPs. We would like to see other commonly used BMPs listed, including inlet filters, constructed wetlands, etc.	SARWQCB	Table 3 is currently consistent with the Riverside County Storm Water Quality Best Management Practice Design Handbook. However, to address this concern, inlet filters and constructed wetlands were specifically listed under "Other BMPs".
45	Exhibit A, Project-Specific WQMP, Section VI, Operation and Maintenance Responsibility for Treatment Control BMPs, Page 10	It may be appropriate to require a short description of the needed operations and maintenance of the chosen devices here or elsewhere in the WQMP.	SARWQCB	Note that Section V.3 of the WQMP Template states, "Insert text – provide brief narrative describing each Treatment Control BMP. Include location, identify the sizing criteria [i.e., stormwater quality design flow (Q_{BMP}) or the stormwater quality design volume (V_{BMP})], preliminary design calculations for sizing BMPs, maintenance procedures, and the frequency of maintenance procedures necessary to sustain BMP effectiveness."
46	Exhibit A, Project-Specific WQMP, Section VII, Funding, Page 11	Please indicate that sources of funds and funding mechanism should be identified and any agreements for funding should be included with the WQMP.	SARWQCB	Text revised to state, "Insert text identifying the funding source or sources for the operation and maintenance of each Treatment Control BMP included in the project."
47	Exhibit A, Project-Specific WQMP, General Comment	It may be useful for the project proponents to have sample calculations and/or sample completed WQMPs.	SARWQCB	Sample calculations have been included in the Riverside County Storm Water Quality Best Management Practice Design Handbook.

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
48	Exhibit B, Typical Pollutants Associated with Urban Runoff	The table provided on page B-2 of Exhibit B shows certain pollutants of concern are expected for various land uses, however provides no references to scientific studies to prove or justify these assumptions. For example, detached residential development is expected to have bacteria/virus, nutrients, pesticides, sediments, trash & debris, oxygen demanding substances and oil & grease as pollutants of concern. In order for a particular land use to be expected to have certain pollutants of concern, there needs to be some study linking these pollutants from the land use in quantities that would warrant a concern. This analysis and link has not been completed and therefore the pollutants in Exhibit B should be listed as potential, unless there is justification for listing them as expected or not expected.	CICWQ	The Permittees have included text that allows a developer, with burden of proof sufficient for the reviewing Permittee, to demonstrate that pollutants associated with the Table on Page B-2 of Exhibit B are not present at a particular site (see revisions to section 4.3).
49	Exhibit C, Treatment Control BMP Selection Matrix, Page C-1	It may be appropriate to indicate that constructed wetlands have high/medium removal efficiency for bacteria.	SARWQCB	Inclusion of the proposed revision deferred pending confirmation by forthcoming SCCWRP report on constructed wetlands.
50	Exhibit D, Appendix A, Page 62	The design volume curve referenced in page 3 of the Riverside County Storm Water Quality Best Management Practice Design Handbook was not accessible in our electronic copy.	SARWQCB	This design volume curve will be included.
51	Various	Various	Defend the Bay	Letter received by District on June 7, 2004. Since the comment letter was received after the close of comment period, these comments will be addressed with comments from SARWQCB review following the June 25, 2004 submittal. Note: Some of the comments are relative to the features of the approved Orange County and San Bernardino County WQMPs. Therefore, issues may have been addressed in the process of reviewing and considering SARWQCB comments on the Public Review Draft (dated April 30, 2004).

Summary of Comments
on Public Review Draft of Riverside County WQMP
(continued)

	Section of WQMP	Comment	Made By	How Addressed
52	Various	Various	San Diego RWQCB	Letter received by District on June 7, 2004. See Comment No. 51.
53	All	We have reviewed the Public Review Draft of the WQMP and are in agreement with its proposed conditions and requirements. If there are any revisions proposed to this document based on comments received during the review period we would like an opportunity to provide additional comments.	City of Riverside	Not applicable.